

Undersea Human Systems Integration Symposium: Technical Session III: HSI and Human Performance

Presented By

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Unclassified Human Performance in the 21st Century



- QDR identified four categories of threats:
 - Traditional
 - Irregular
 - Catastrophic
 - Disruptive

US Military Must Be Adaptive!

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Introduction



The Emergence of Advanced Technologies

Factors That Impact Human Performance

**Challenges to Information Management,
Problem Solving and Human Performance**

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**Factors That Impact
Human Performance**



Technology Enables and Empowers

**Global
Shared Awareness & Understanding**

**Information “Sense Making”:
Mission Requirements & Capabilities**



UHSI: Technical Session III

- **Imperfect knowledge of the situation... can bring military action to a standstill..."**

Karl von Clausewitz

UHSI: Technical Session III



- How do we achieve Optimized Human Performance?



Human Decision Maker

**Mental Models of Decision Maker
(including adversaries)
must be considered**

Cultural Differences impact decision making

**Information Flow Patterns
Shape Dynamic SA**

**Cognitive and Perceptual Processes help to
shape perceptions and SA**



Joint Information Operations Report

- **Joint Information Operations Report (Feb 2006)**
- **Defines requirements and capabilities to support**

Joint Multi-National Operational Environment

- **Information Environment**
- **Information Operation Capabilities/what are the critical capabilities required to sustain global SA?**
- **Roles for civil, military and joint diplomacy**

**How do we achieve
optimized human performance
in this dynamic information environment?**



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Technical Session II: Panel Members

- **Chair: Dr. Yvonne R. Masakowski, NUWC**
- **Mr. John Snow and Mr. James Ross, Dynamics Research Corporation (DRC).**
- **Dr. Cullen Jackson, Aptima, Inc.**
- **Dr. Katharine Shobe, Submarine Learning Center**
- **Mr. Vance Kinsey, Submarine Learning Center**